

By Lt. Matt Maxwell

ur TACAMO crew just had come off a high op-tempo exercise the previous week, and we looked forward to a short, four-hour, air-refueling flight. After more than 30 hours of flying in three days, the crew was feeling the effects.

As a team, we ORM'd the evolution and agreed we had had the required crew rest for the mission at hand. Air refueling is one of the most exciting things you can do in the E-6B. If we took on this mission, we figured, the Ops O might be inclined to give us some much needed R&R on the back end.

Our flight would take off slightly after sunset, a time when all our crews had noticed increased deer activity around the NAS Patuxent River airfield. So, before we completed the brief, we addressed the concern of deer in the vicinity of the runways. The previous month, another crew had submitted a BASH (bird animal strike hazard) report for a near-miss after having to offset 20 feet left of centerline to avoid two deer paralleling their path down the runway. That crew reported the two deer actually had passed between their No. 3 and 4 engines.

Since fall brings a change in white-tail deer behavior, when the passiveness of spring and summer are

replaced with the frenzy of the breeding season, it appeared we may be dealing with suicidal deer at our forward-operating base; I didn't want to assist in their quest. Again, we used risk analysis and focused on what we would do in the event of a deer strike below our V1 speed. Satisfied with our brief, we pressed with the before-start checklist.

Engine starts were uneventful, and, within 15 minutes, we were ready to go. Winds at Pax River were favoring runway 32, so it was going to be a long taxi. Our flight-deck crew had plenty of experience to go around: I was an instructor pilot; my flight engineer also was an instructor; and my copilot was a transition lieutenant and prior S-3 FRS instructor.

Because we had seen deer moving around on previous nights while taxiing, we kept watching for them. I had been calling all week for deer sweeps before takeoffs and landings. When tower personnel were unable to assist in spotting deer, I would back-taxi down the runway before takeoff or fly a low approach before landing.

As we arrived at runway 32, we were told to hold short for arriving traffic; two P-3s in the pattern were doing touch-and-goes. With a couple of planes beating

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up the pattern, I figured there could be no better way to do a deer sweep. Satisfied with the situation, our flight engineer (FE) called for the before-takeoff brief. I spouted out the standard blurb, adding the caveat of what we would do in the event of a deer on the runway during takeoff roll. If deer were spotted before our decision speed of 131 knots, I would abort. After V1, I would continue unless I thought we couldn't take off or risk putting ourselves in a worse situation. In our minds, there was no question about what we were going to do in the event of a Bambi sighting.

We waited for one of the planes on landing rollout to clear the runway, so tower would allow us to take off. Tower cleared us; I stood up the throttles, and held the brakes until the engines were stable. I then called for takeoff thrust, and away we went. Airspeed was increasing, and everything looked good: 80, 100, 110 knots. Then, all of a sudden, there he was: a nice 8-to-12-point buck, running from right to left across the runway—dead ahead.

Just as I started to execute the abort procedures, I heard the flight engineer call, "Abort!"

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A second later, we heard a loud thud, followed by

a bump, as if we had hit a pothole. I pulled back the throttles to idle, put out the speed brakes, and

put out the speed brakes, and pulled up the reversers. I followed with

a "four green" call.

The engines appeared to function normally, which was a huge relief. I had feared the worst of what could have been a severe hit on one of our low-hanging motors. I had the

engineer keep an eye on the engines as a precaution, and I applied max reverse. I was encouraged as they spun up and provided max-reverse thrust.

I also was curious if the deer had done any damage to our nosewheel steering and was relieved to find I had full control over the aircraft. As we decelerated, the copilot called out our distance remaining and speed, and the engineer said the hydraulics checked good. As the plane slowed with about 4,000 feet of runway remaining, I came on the brakes and brought us to a stop.

I had the copilot tell tower we had aborted the takeoff and would taxi off at the end to check the extent of our damage. We also told tower there was a good possibility of a fouled runway because of a deer strike, and other aircraft should wait until an inspection could be performed. Once we cleared the active, I sent the engineer overboard to see if there was any damage and if we should be towed back to our parking spot. After a brief inspection, he said everything looked OK... except for the blood and guts over all the aircraft.

Once everyone was back on board, we had a nice,

long taxi to our spot, and I

had time to reflect on what had happened. We just

had performed a highspeed abort on takeoff roll because of a deer strike. Anyone who flies knows that a high-speed abort is a high-gain event, but, in a heavy jet, it's even worse.

Good CRM definitely played a factor in a positive outcome that night. We had talked about what





we would do if this happened, so the plan was fresh in our minds as we took the runway. Once the strike occurred, everyone's role was almost second nature. I continued to control the aircraft, the copilot advised the tower of what had happened while simultaneously backing me up, and the flight engineer let me know if I had lost any systems. It's funny though, because we had a lot of experience on the flight deck, and even with all the preparation about a possible deer strike (normally perfect preparation for a non-event), the strike still happened. This situation proves that anything can and will happen.

Once we finally got in the spot and shut down, I jumped out to take a look at the mess. I saw blood, guts and fur from the nose of the aircraft, all the way down the left side to the underside of the wings, and a bit even was on the horizontal stab. Amazingly, the aircraft suffered no damage. We did, however, change the nose tires because they were covered in deer meat and fur. After a tire change and a good washing, aircraft 409 was as good as new. I guess a 290,000-pound aircraft will win a bout with a 180-pound deer anytime.

Lt. Maxwell flies with VQ-4.

am the station POC for BASH-related issues at NAS Patuxent River. We have a very active BASH program that was started more than 20 years ago. The station BASH committee, with members from air operations, air traffic control (ATC), air field facilities (AFD), and the environmental department, meets quarterly to discuss current and upcoming issues. We also discuss options for corrective actions. Those actions may be to reinforce the reporting requirements, to increase dispersal efforts by AFD, or even to lethally remove problem wildlife with the use of federal or state permits.

The local recreational-hunting program is very closely tied to the BASH program and is the method by which the air station manages its deer population. An annual harvest quota is calculated, using a model developed and implemented in the early 1990s. This model uses deer-spotlight-count data to establish a 90-percent confidence range, resulting in a deer population that doesn't increase from year to year.

Since 1995, a couple of years after the model was implemented, there have been three deer-aircraft strikes, and the strike described in this story was only the second one in the last five years. This count gives us an average deer-strike rate of .3 deer per year from 1995 to 2005, down from a rate of 2 per year from 1985 to 1994—a significant decrease.

Here's other bit of information pertinent to this story. The first and second week of November is the peak time for rutting (deer-breeding-season) activity for the station. Accordingly, bucks travel more often and farther to find a receptive doe. They also run on a one-track mind, and their usual wariness goes out the window, or, in this case, between the tires.

Based on the account from the pilot, this deer was oblivious to the approach of the aircraft and never once looked up to see what that bright light was—typical for a buck during the peak of the rut. Managing deer during this time is difficult, and we have to increase the awareness of the tower and the pilots.

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